

Washington State Institute for Public Policy

Meta-Analytic Results

Merit aid (for high school students) Higher Education

Literature review updated December 2016.

As part of WSIPP's research approach to identifying evidence-based programs and policies, WSIPP determines "what works" (and what does not work) to improve outcomes using an approach called meta-analysis. For detail on our methods, see our Technical Documentation. At this time, WSIPP has not yet calculated benefits and costs for this topic.

Program Description: Undergraduate students receive merit aid based on prior academic achievement, such as SAT/ACT scores or high school GPA. Students may be able to renew their merit aid awards each year if they continue to reach certain academic benchmarks. Merit aid rewards students for past achievements, and encourages them to continue meeting high academic standards. Studies included in merit aid (for high school students) examine effects of aid prior to enrolling in college.

Meta-Analysis of Program Effects										
Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit- cost analysis						Unadjusted effect size (random effects	
			First time ES is estimated			Second time ES is estimated			model)	
			ES	SE	Age	ES	SE	Age	ES	p-value
Enroll in 2-year college	6	38574	-0.034	0.054	19	-0.034	0.054	19	-0.034	0.529
Enroll in 4-year college	9	52978	0.093	0.029	19	0.093	0.029	19	0.093	0.001
Graduate with 2-year degree	4	400331	-0.006	0.002	27	-0.006	0.002	27	-0.006	0.008
Graduate with 4-year degree	5	400499	-0.001	0.021	27	-0.001	0.021	27	-0.001	0.955
Persistence into 2nd year	3	6261	0.019	0.032	19	0.019	0.032	19	0.019	0.560
Persistence into 3rd year	1	524	0.195	0.077	20	0.195	0.077	20	0.195	0.011
Persistence into 4th year	2	21145	0.061	0.138	21	0.061	0.138	21	0.061	0.657

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our Technical Documentation.

- Angrist, J.D., Autor, D.H., Hudson, S., & Pallais, A. (2014). Leveling up: Early results from a randomized evaluation of post-secondary aid. Cambridge, MA: National Bureau of Economic Research.
- Bruce, D.J., & Carruthers, C.K. (2014). Jackpot? The impact of lottery scholarships on enrollment in Tennessee. Journal of Urban Economics, 81(3), 30-44.
- Castleman, B.L. (2014). The impact of partial and full merit scholarships on college entry and success: Evidence from the Florida Bright Futures Scholarship Program (EdPolicy Works Working Paper Series No. 17). Charlottesville, VA: EdPolicyWorks, University of Virginia.
- Cohodes, S.R., & Goodman, J.S. (2014). Merit aid, college quality, and college completion: Massachusetts' Adams scholarship as an in-kind subsidy. American Economic Journal: Applied Economics, 6(4), 251-285.
- Domina, T. (2014). Does merit aid program design matter? A cross-cohort analysis. Research in Higher Education, 55(1), 1-26.
- Dynarski, S. (2004). The new merit aid. In C.M. Hoxby (Ed.), *College choices: The economics of where to go, when to go, and how to pay for it* (pp. 63-100). Chicago, IL: University of Chicago Press.
- Dynarski, S.M. (2008). Building the stock of college-educated labor. The Journal of Human Resources, 43(3), 576-610.
- Kane, T.J. (2003). A quasi-experimental estimate of the impact of financial aid on college-going. Cambridge, MA: National Bureau of Economic Research.
- Nyshadham, A. (2013). Describing the marginal enrollee: Merit-based tuition subsidies revisited (Unpublished manuscript). Los Angeles, CA: University of Southern California.
- Page, L.C., Castleman, B.L., & Sahedewo, G.A. (2016). More than dollars for scholars: The impact of the Dell Scholars Program on college access, persistence and degree attainment. Unpublished manuscript
- Sjoquist, D.L., & Winters, J.V. (2015). State merit-based financial aid programs and college attainment. Journal of Regional Science, 55(3), 364-390.

For further information, contact: (360) 664-9800, institute@wsipp.wa.gov

Printed on 07-12-2017



Washington State Institute for Public Policy